

FIG.1

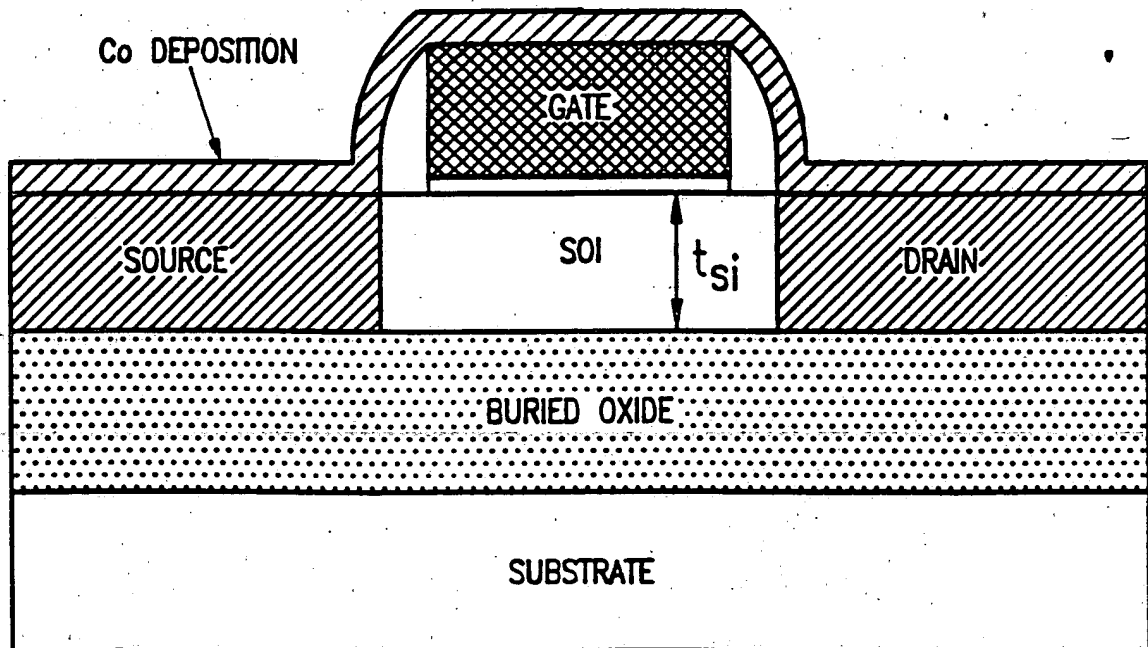


FIG.2

use 2nd set

099044-01101 E8420650

FORM Co_2Si BY LOW TEMPERATURE ANNEAL

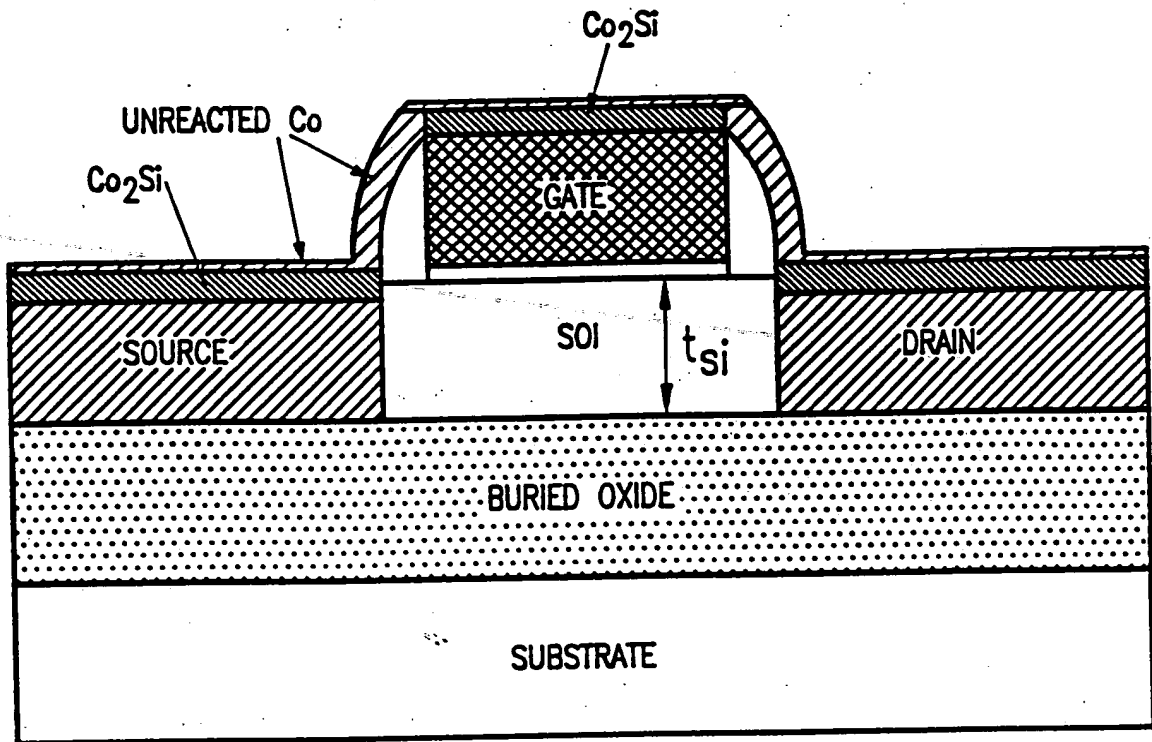


FIG.3

DEPOSITE $\alpha\text{-Si}$

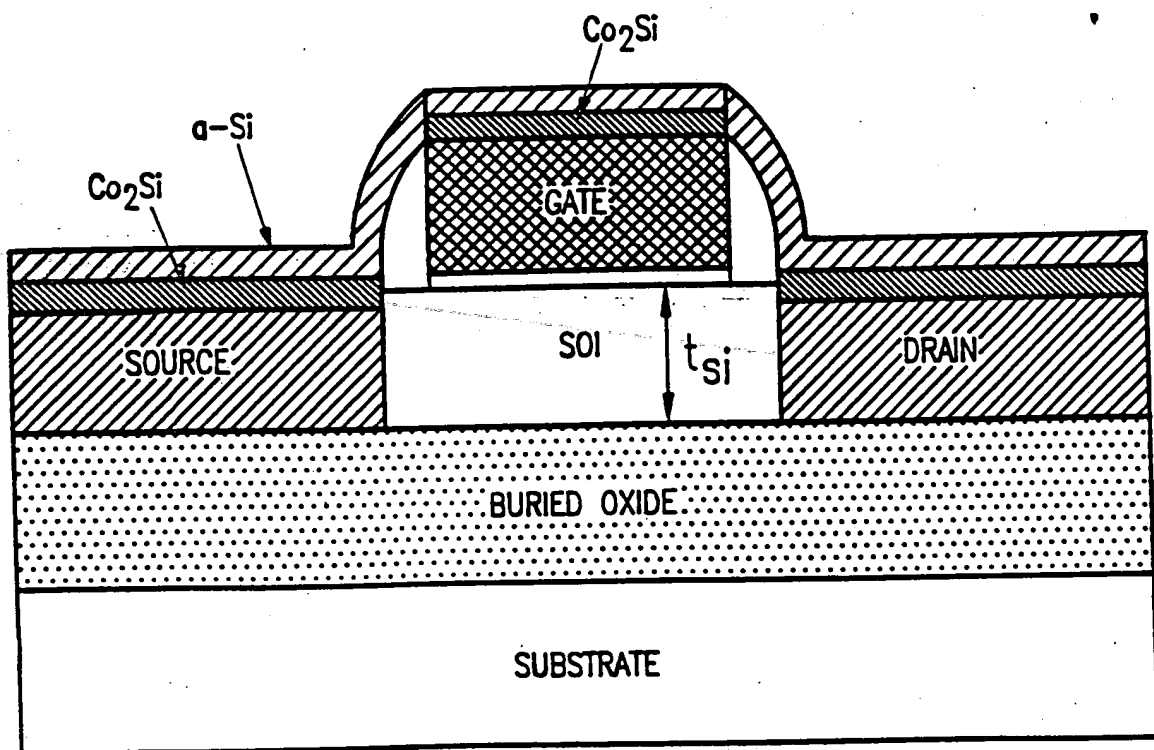


FIG.4

09902443-071101
TOT 40 E8420660

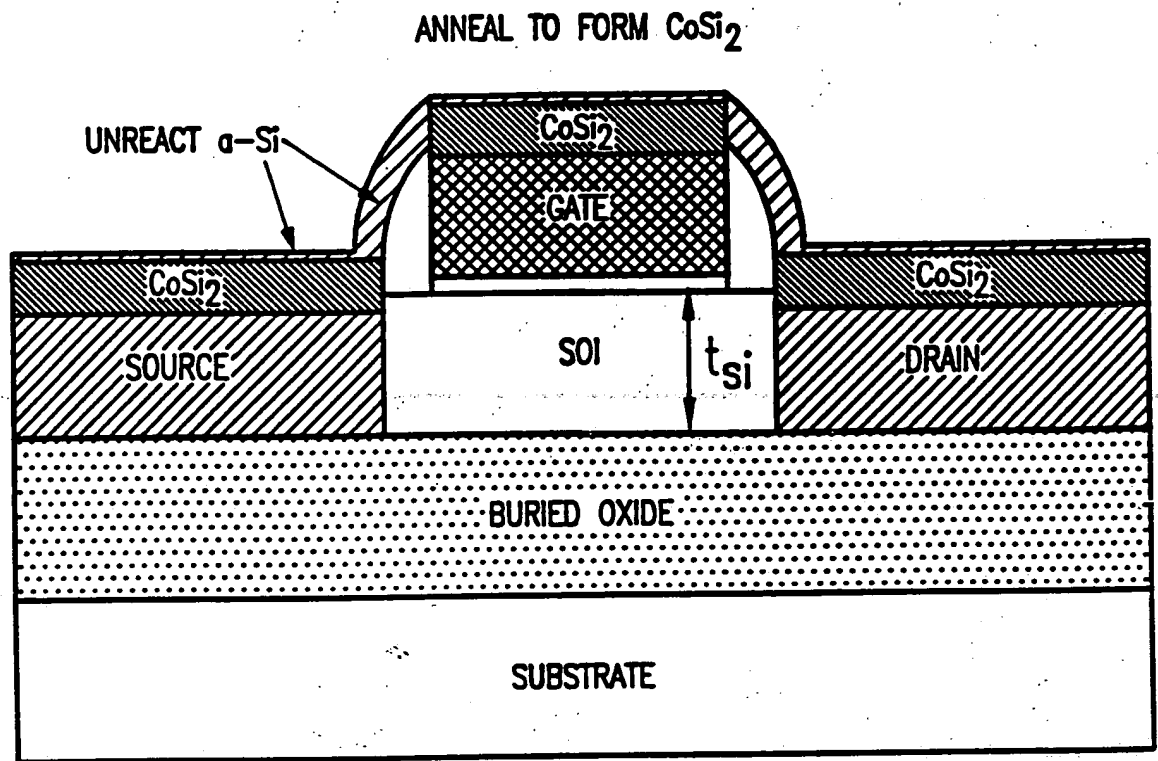


FIG.5

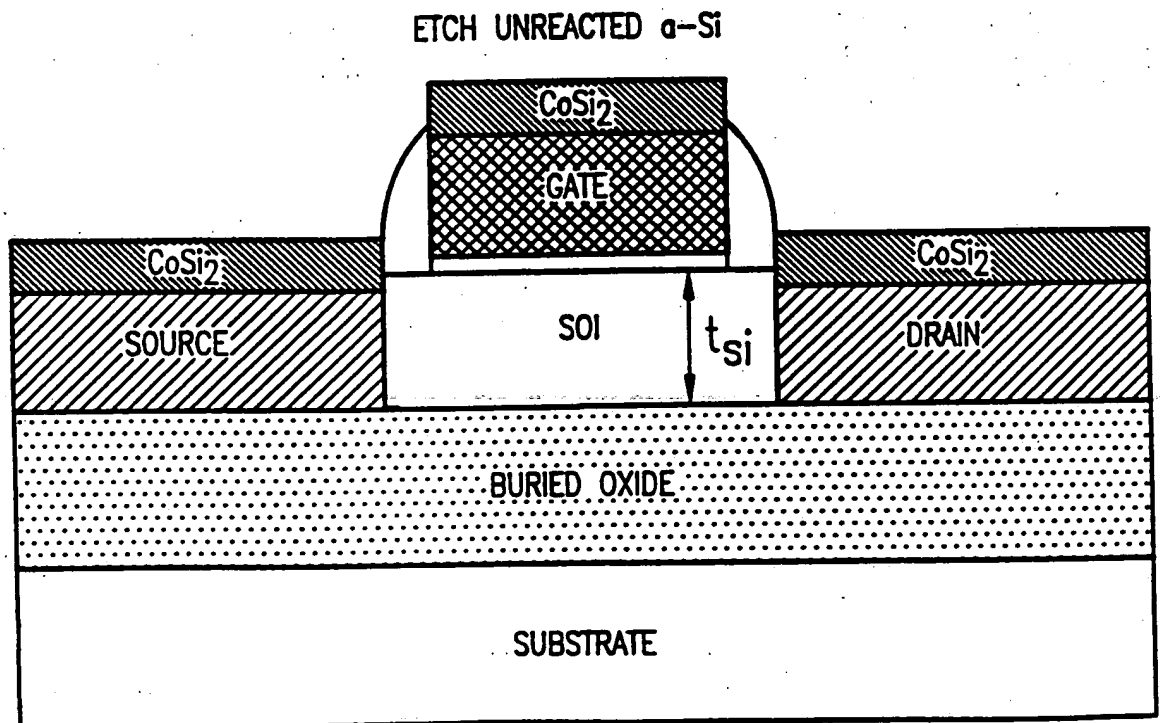


FIG.6

09002443-071101
TOT 40-EB420660

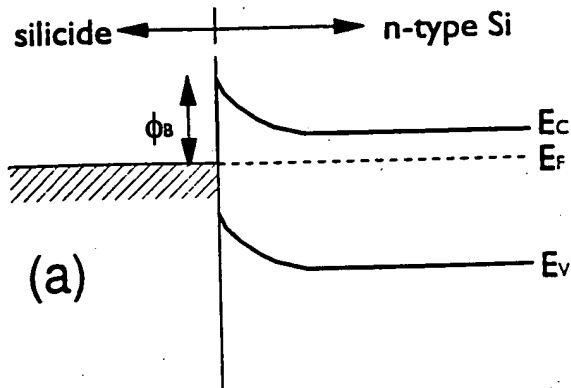


Fig. 7 (a)

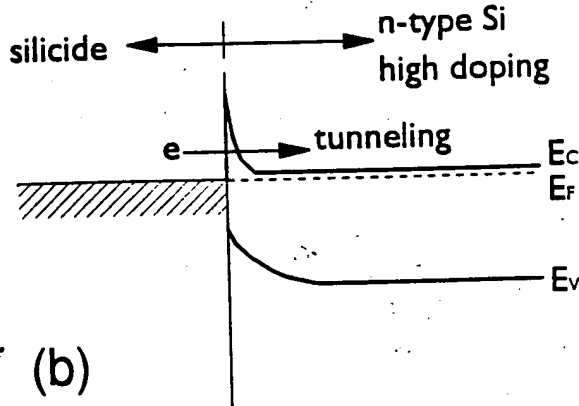
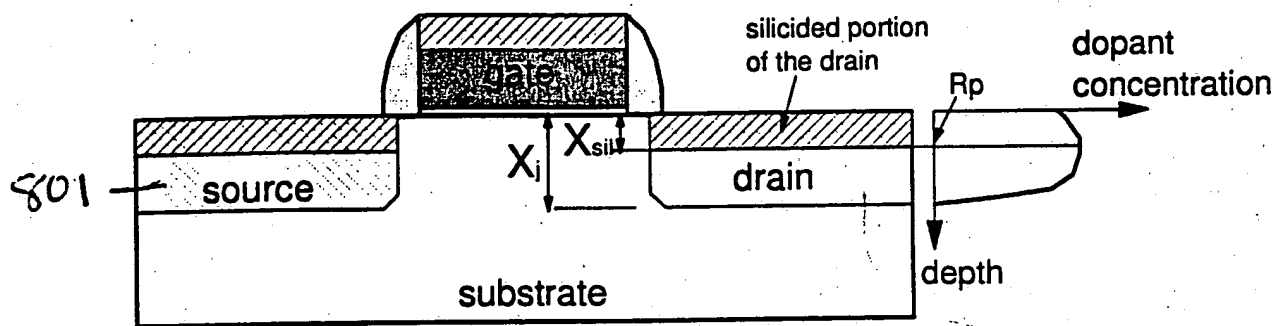


Fig. 7 (b)

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800



X_j = source or drain junction depth

X_{sil} = silicide junction depth

R_p = peak dopant concentration

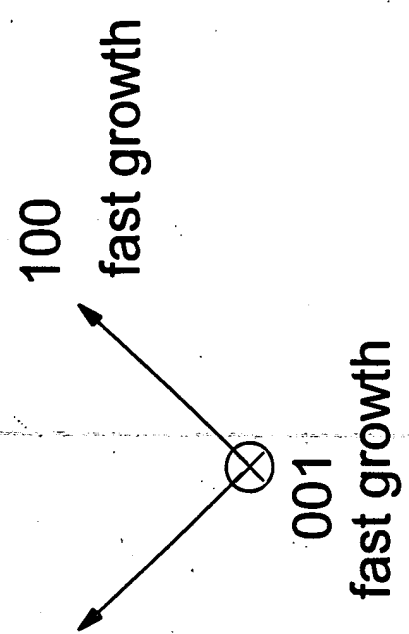
Requirements:

1. $X_j > X_{sil}$
2. X_{sil} roughly equals R_p

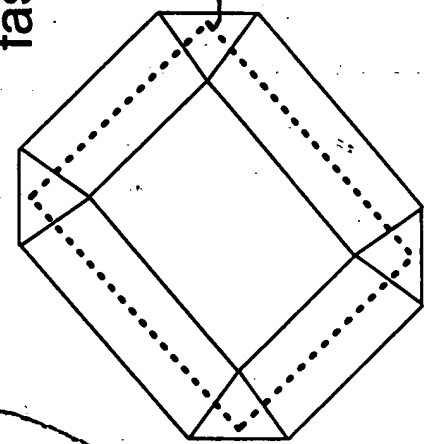
Figure 8

090243-071101

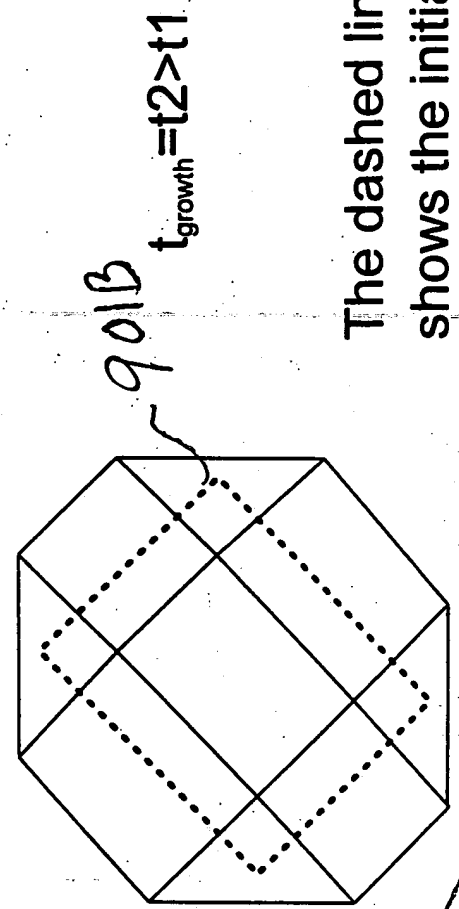
Fig. 9B
E3420660



fast growth



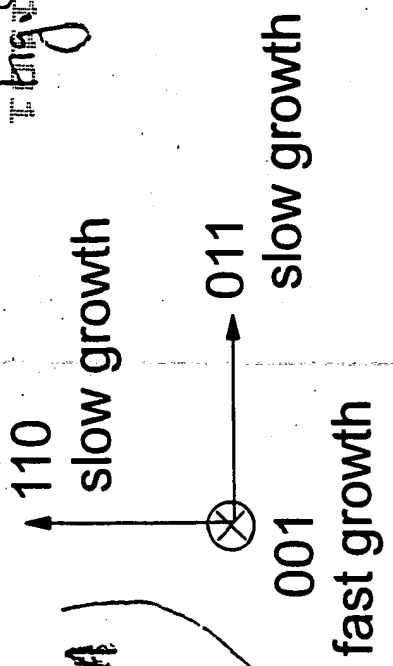
$t_{\text{growth}} = t1$



$t_{\text{growth}} = t2 > t1$

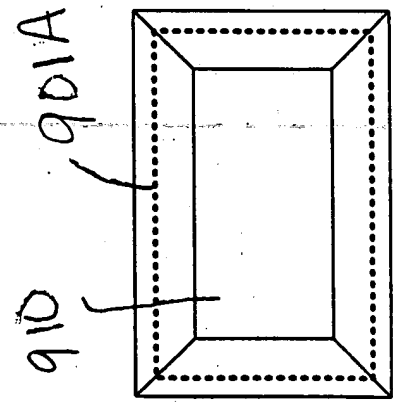
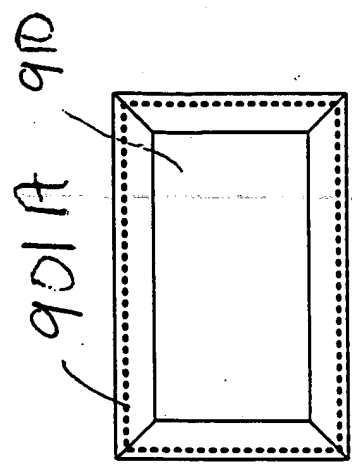
The dashed line shows the initial growth window which is defined by the hard mask

Fig. 9A



slow growth

fast growth



$t_{\text{growth}} = t2 > t1$